

## CLAIMS

The invention claimed is:

1. A method of generating an updated version of a project management scheduling chart using a computer system, the chart containing a plurality of chart data elements

5 to be updated, comprising the steps of:

selecting one of multiple source data elements in one or more data sources linked to each chart data element for use in generating the updated project management scheduling chart; and

generating the updated version of the project management scheduling chart using the selected source data elements.

2. The method of claim 1, further comprising the step of linking each chart data element to be updated to the multiple source data elements in the one or more data sources.

3. The method of claim 2, wherein the step of linking each chart data element to be updated to multiple source data elements in one or more data sources includes the steps of:

assigning chart identification numbers to each chart data element to be updated; and

linking the chart identification numbers to the multiple source data elements in the one or more data sources.

4. The method of claim 3, wherein the step of assigning chart identification numbers to each chart data element to be updated includes the steps of:

importing the chart data elements to be updated into a database; and

assigning chart identification numbers to each chart data element in the

5 database.

5. The method of claim 4, wherein the step of linking the chart identification numbers to the multiple source data elements in the one or more data sources includes the step of:

linking the chart identification numbers to unique identification numbers associated with the multiple source data elements in the one or more data sources.

6. The method of claim 5, wherein the step of linking the chart identification numbers to unique identification numbers associated with the multiple source data elements in the one or more data sources includes the step of:

15 creating maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or more data sources, each map containing information identifying one of the linked multiple source data elements for use in generating the updated project management scheduling chart.

7. The method of claim 6, wherein the step of selecting one of the multiple source data elements linked to each chart data element for use in generating the updated project management scheduling chart includes the step of:

reading the maps linking the chart identification numbers to the unique  
5 identification numbers associated with the multiple source data elements in the one or more data sources to identify one of the multiple source data elements linked to each chart identification number for use in generating the updated project management scheduling chart.

8. A computer system for generating an updated version of a project management scheduling chart containing a plurality of chart data elements to be updated, comprising:

a first memory for storing the project management scheduling chart containing the plurality of chart data elements to be updated;

a second memory for storing information linking each of the chart data  
15 elements to multiple source data elements in one or more data sources and identifying one of the multiple source data elements for each chart data element for use in generating the updated version of the project management scheduling chart;

the one or more data sources containing the multiple source data elements linked to the chart data elements; and

20 an Update Module adapted to be used to select one of the multiple source data elements linked to each chart data element for use in generating the updated

project management scheduling chart, and generate the updated version of the project management scheduling chart using the selected source data elements.

9. The computer system of claim 8, wherein the Update Module is adapted to be used to link each chart data element to be updated to the multiple source data elements in the one or more data sources.

10. The computer system of claim 9, wherein:

the information linking each of the chart data elements to multiple source data elements in one or more data sources includes chart identification numbers associated with each chart data element to be updated; and

the Update Module is adapted to be used to assign the chart identification numbers to each chart data element to be updated and to link the chart identification numbers to the multiple source data elements in the one or more data sources.

11. The computer system of claim 10, wherein the Update Module is adapted to be used to import the chart data elements to be updated into the second memory and to assign chart identification numbers to each chart data element in the second memory.

12. The computer system of claim 11, wherein:

the information linking each of the chart data elements to multiple source data elements in one or more data sources includes unique identification numbers associated with the multiple source data elements;

the one or more data sources include the unique identification numbers associated with the multiple source data elements; and

the Update Module is adapted to be used to link the chart identification numbers to the unique identification numbers associated with the multiple source data elements.

13. The computer system of claim 12, wherein:

the information linking the chart data elements to multiple source data elements includes maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or more data sources, each map containing information identifying one of the linked multiple source data elements for use in generating the updated project management scheduling chart; and

the Update Module is adapted to be used to create the maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or more data sources.

14. The computer system of claim 13, wherein the Update Module is adapted to be used to read the maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or more data sources to identify one of the multiple source data elements linked to each chart identification number for use in generating the updated project management scheduling chart.

15. A method of generating a comparison project management scheduling chart for a project management scheduling chart containing a plurality of original chart data elements using a computer system, comprising the steps of:

selecting one of multiple source data elements in one or more data  
5 sources linked to one or more chart data elements to be compared for use in generating the comparison project management scheduling chart; and

generating the comparison project management scheduling chart using the selected source data elements and the plurality of original chart data elements.

16. The method of claim 15, further comprising the step of linking the one or more chart data elements to be compared to multiple source data elements in the one or more data sources.

17. The method of claim 16, wherein the step of linking one or more chart data elements to be compared to multiple source data elements in one or more data sources includes the steps of:

15 assigning chart identification numbers to the one or more chart data elements to be compared; and

linking the chart identification numbers to the multiple source data elements in the one or more data sources.

18. The method of claim 17, wherein the step of assigning chart identification  
20 numbers to the one or more chart data elements to be compared includes the steps of:

importing the one or more chart data elements to be compared into a database; and

assigning chart identification numbers to the one or more chart data elements in the database.

5 19. The method of claim 18, wherein the step of linking the chart identification numbers to the multiple source data elements in the one or more data sources includes the step of:

linking the chart identification numbers to unique identification numbers associated with the multiple source data elements in the one or more data sources.

20. The method of claim 19, wherein the step of linking the chart identification numbers to unique identification numbers associated with the multiple source data elements in the one or more data sources includes the step of:

15 creating maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or more data sources, each map containing information identifying one of the linked multiple source data elements for use in generating the comparison project management scheduling chart.

20 21. The method of claim 20, wherein the step of selecting one of the multiple source data elements linked to the one or more chart data elements to be compared for use in generating the comparison project management scheduling chart includes the step of:

reading the maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or more data sources to identify one of the multiple source data elements linked to each chart identification number for use in generating the comparison project management scheduling chart.

22. A computer system for generating a comparison project management scheduling chart for a project management scheduling chart containing a plurality of original chart data elements, comprising:

a first memory for storing the project management scheduling chart containing the plurality of original chart data elements;

a second memory for storing information linking one or more of the original chart data elements to be compared to multiple source data elements in one or more data sources and identifying one of the multiple source data elements for each of the one or more original chart data elements to be compared for use in generating the comparison project management scheduling chart;

the one or more data sources containing the multiple source data elements linked to the one or more original chart data elements; and

an Update Module adapted to be used to select one of the multiple source data elements linked to each of the one or more original chart data elements to be compared for use in generating the comparison project management scheduling chart and generate the comparison version of the project management scheduling chart



using the selected source data elements and the plurality of original chart data elements.

23. The computer system of claim 22, wherein the Update Module is adapted to be used to link the one or more original chart data elements to be compared to the multiple source data elements in the one or more data sources.

24. The computer system of claim 23, wherein:

the information linking the one or more original chart data elements to be compared to multiple source data elements in one or more data sources includes chart identification numbers associated with each of the one or more original chart data elements to be compared; and

the Update Module is adapted to be used to assign the chart identification numbers to the one or more original chart data elements to be compared and to link the chart identification numbers to the multiple source data elements in the one or more data sources.

25. The computer system of claim 24, wherein the Update Module is adapted to be used to import the one or more original chart data elements to be compared into the second memory and to assign chart identification numbers to the one or more original chart data elements in the second memory.

26. The computer system of claim 25, wherein:

the information linking the one or more original chart data elements to be compared to multiple source data elements in one or more data sources includes unique identification numbers associated with the multiple source data elements;

the one or more data sources include the unique identification numbers associated with the multiple source data elements; and

the Update Module is adapted to be used to link the chart identification numbers to the unique identification numbers associated with the multiple source data elements.

27. The computer system of claim 26, wherein:

the information linking the one or more original chart data elements to be compared to multiple source data elements includes maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or more data sources, each map containing information identifying one of the linked multiple source data elements for use in generating the comparison project management scheduling chart; and

the Update Module is adapted to be used to create the maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or more data sources.

28. The computer system of claim 27, wherein the Update Module is adapted to be used to read the maps linking the chart identification numbers to the unique identification numbers associated with the multiple source data elements in the one or

more data sources to identify one of the multiple source data elements linked to each chart identification number for use in generating the comparison project management scheduling chart.

29. A method for generating an updated version of a project management  
5 scheduling chart using a computer system, comprising the steps of:

inputting into the computer system information identifying a project management scheduling chart to be updated, the chart containing a plurality of chart data elements to be updated;

inputting into the computer system information identifying one or more data sources containing multiple source data elements to be used to generate an updated version of the project management scheduling chart;

inputting into the computer system a request for the computer system to generate the updated version of the project management scheduling chart; and

wherein the computer system performs the step of:

15 locating maps associated with the identified project management scheduling chart, each map containing information identifying multiple source data elements contained within the one or more data sources and linked to each of the chart data elements, each map further containing information identifying a type of source data element to be used when selecting one of the linked  
20 multiple source data elements for use in updating each chart data element;

reading the maps and identifying a type of source data element  
to be used to update each chart data element;

retrieving the identified type of source data element for each  
chart data element from the one or more data sources; and

5 generating the updated version of the project management  
scheduling chart using the retrieved source data elements.

30. A computer system for generating an updated version of a project  
management scheduling chart, comprising:

an input means for inputting into the computer system information  
identifying a project management scheduling chart containing a plurality of chart  
data elements to be updated, information identifying one or more data sources  
containing multiple source data elements to be used to generate the updated  
version of the project management scheduling chart, and a request for the computer  
system to generate the updated version of the project management scheduling  
15 chart;

the one or more data sources containing multiple source data elements  
to be used to generate an updated version of the project management scheduling  
chart;

a memory for storing the identified project management scheduling  
20 chart containing the plurality of chart data elements to be updated and for storing  
maps associated with the identified project management scheduling chart, each

map containing information identifying multiple source data elements contained within the one or more data sources and linked to each of the chart data elements, each map further containing information identifying a type of source data element to be used when selecting one of the linked multiple source data elements for use in  
5 updating each chart data element; and

an Update Module for reading the maps and identifying a type of source data element to be used to update each chart data element, retrieving the identified type of source data element for each chart data element from the one or more data sources, and generating the updated version of the project management scheduling chart using the retrieved source data elements.

31. A method of generating and updating a project management scheduling chart using a computer system, comprising the steps of:

generating a project management scheduling chart, the project management scheduling chart including a plurality of chart data elements;

15 linking each chart data element to multiple source data elements in one or more data sources;

selecting one source data element for each chart data element for use in generating an updated version of the project management scheduling chart; and

generating the updated version of the project management scheduling  
20 chart using the selected source data elements.

32. The method of claim 31, wherein the step of generating a project management scheduling chart includes the steps of:

activating a GOPMSC Module for use in creating the project management scheduling chart; and

5 creating the project management scheduling chart using the GOPMSC Module.

33. The method of claim 32, wherein the step of linking each chart data element includes the steps of:

importing each chart data element into a database in the computer system;

assigning chart identification numbers to each chart data element; and

10 creating maps in the database linking each chart identification number to the multiple source data elements in the one or more data sources, each map containing information identifying one of the multiple source data elements to be  
15 used in generating the updated version of the project management scheduling chart.

34. The method of claim 33, wherein the step of selecting one source data element for each chart data element includes the step of reading the maps containing information identifying one of the multiple source data elements to be used in generating the updated version of the project management scheduling chart.

20 35. The method of claim 34, further comprising the steps of:

linking one or more of the chart data elements to be compared to multiple new source data elements in one or more new data sources;

selecting one new source data element for each chart data element to be compared; and

5           generating a comparison project management scheduling chart using the plurality of data elements and the one or more selected new source data elements.

36.   The method of claim 35, wherein the step of linking one or more of the chart data elements to be compared includes the step of creating new maps linking each chart identification number associated with the one or more chart data elements to be compared to the multiple new source data elements in the one or more new data sources, each new map containing information identifying one of the multiple new source data elements to be used in generating the comparison project management scheduling chart.

15   37.   The method of claim 36, wherein the step of selecting one new source data element for each chart data element to be compared includes the step of reading the new maps containing information identifying one of the multiple new source data elements to be used in generating the comparison project management scheduling chart.

20   38.   A computer system for generating and updating project management scheduling charts, comprising:

a GOPMSC Module for generating a project management scheduling chart, the project management scheduling chart including a plurality of chart data elements;

an Update Module for linking each chart data element to multiple source data elements in one or more data sources, selecting one source data element for each chart data element for use in generating an updated version of the project management scheduling chart, and generating the updated version of the project management scheduling chart using the selected source data elements;

a memory for storing the project management scheduling chart and information linking each chart data element to the multiple source data elements in the one or more data sources and identifying one of the multiple source data elements for each chart data element for use in generating the updated version of the project management scheduling chart; and

the one or more data sources containing the multiple source data elements.

39. The computer system of claim 38, wherein

the Update Module is operable to activate the GOPMSC Module.

40. The computer system of claim 39, wherein:

the computer system includes a database; and

the Update Module is operable to link each chart data element to multiple source data elements in one or more data sources by importing each chart



data element into the database, assigning chart identification numbers to each chart data element, and creating maps in the database linking each chart identification number to the multiple source data elements in the one or more data sources, each map containing information identifying one of the multiple source data elements to be used in generating the updated version of the project management scheduling chart.

41. The computer system of claim 40, wherein the Update Module is operable to select one source data element for each chart data element by reading the maps containing information identifying one of the multiple source data elements to be used in generating the updated version of the project management scheduling chart.

42. The computer system of claim 41, wherein:

the computer system includes one or more new data sources containing multiple new source data elements; and

the Update Module is further operable to link one or more of chart data elements to be compared to the multiple new source data elements in one or more new data sources, select one new source data element for each chart data element to be compared, and generate a comparison project management scheduling chart using the plurality of selected source data elements and the one or more selected new source data elements.

43. The computer system of claim 42, wherein the Update Module is operable to link the one or more of the chart data elements to be compared by creating new

maps linking each chart identification number associated with the one or more  
chart data elements to be compared to the multiple new source data elements in the  
one or more new data sources, each new map containing information identifying one  
of the multiple new source data elements to be used in generating the comparison  
5 the project management scheduling chart.

44. The computer system of claim 43, wherein the Update Module is operable to  
select one new source data element for each chart data element to be compared by  
reading the new maps containing information identifying one of the multiple new  
source data elements to be used in generating the comparison project management  
scheduling chart